

In the Specification:

Replace paragraph 0041 with the following paragraph:

The same as the other gratings used, the detector grating 5 is also embodied as a diffracting phase grating, which splits the incoming light into at least three orders of diffraction, or spatial directions. In a preferred embodiment, splitting into the zero order of diffraction, into the +/- 1st orders of diffraction, as well as into the +/- 2nd orders of diffraction is provided. As one of ordinary skill in the art would readily understand from the previous discussion, detector element 6.1 receives zeroth and -2nd order split beams denoted (+1, -1, 0) and (-1, +1, -2), detector element 6.2 receives +1st and -1st order split beams denoted (+1, -1, +1) and (-1, +1, -1) and detector element 6.3 receives zeroth and +2nd order split beams denoted (-1, +1, 0) and (+1, -1, +2). The partial beams of rays propagated in the direction of the three detector elements 6.1, 6.2, 6.3 are identified in FIG. 1 by the recitation of the respective orders of diffraction which interfere with each other at the various gratings.

On page 20, line 2, replace the paragraph after the heading "ABSTRACT OF THE DISCLOSURE" with the following paragraph:

An interferential position measuring arrangement including a light source ~~connected to a first object~~, which emits a beam of rays ~~in a direction of an optical axis~~ and an optical element ~~arranged downstream of the light source~~, which converts the beam of rays emitted by the light source into an incoming beam of rays. A scale grating ~~connected to a second object that moves relative to the first object~~, which splits the incoming beam of rays into a first partial beam of rays, ~~which is propagated into a first spatial direction~~ and a second partial beam of rays, ~~which is propagated into a second spatial direction~~. A first scanning grating that causes splitting of the first partial beam of rays ~~into third and fourth partial beams of rays~~ and a

second scanning grating that causes splitting of the second partial beam of rays into fifth and sixth partial beams of rays, wherein at least two of the third, fourth, fifth and sixth partial beams of rays meet again, and a periodically modulated interferential fringe pattern with a definite spatial interferential fringe pattern period results in a detection plane. A detection arrangement arranged in the detection plane, which causes splitting of light entering through the detection arrangement into at least three different spatial directions and optoelectronic detector elements arranged in the at least three spatial directions for detecting phase-shifted scanning signal.